


**The Timken Company**

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## Part Number 3MMV9103HXVVSUMFS637, Fafnir® High Speed Spindle Angular Contact Ball Bearings (9300HX, 9100HX)

Timken® angular contact ball bearings are designed for combination radial and axial loading. Single-row bearings have high thrust capacity in one direction. Some single-row bearings are specifically designed for duplex mounting in sets for maximum performance.



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### Specifications

<b>Rows per Set</b>	Single
<b>Seal Type</b>	High Speed
<b>Design Units</b>	Metric
<b>d - Bore</b>	17 mm
<b>Ball Type</b>	STEEL
<b>Cage Type</b>	CR - Phenolic Outer Land Riding Cage

## Dimensions



<b>D - Outer Diameter</b>	35 mm 1.378 in
<b>Bearing Width</b>	10 mm 0.3937 in
<b>Total Width</b>	10 mm 0.3937 in
<b>Contact Angle</b>	25 °

## Basic Load Ratings

<b>C0 - Static Radial Rating (per row)</b>	2700 N 610 lbf
<b>Ce - Dynamic Radial Rating (per row)<sup>1</sup></b>	6580 N 1480 lbf
<b>C1 ISO - Dynamic Radial Rating (per row)</b>	5980 N 1340 lbf

## Factors

<b>Limiting Speed (Grease) (per row)</b>	53000 rpm
<b>Limiting Speed (Oil)</b>	106000 rpm

## Abutment and Fillet Dimensions

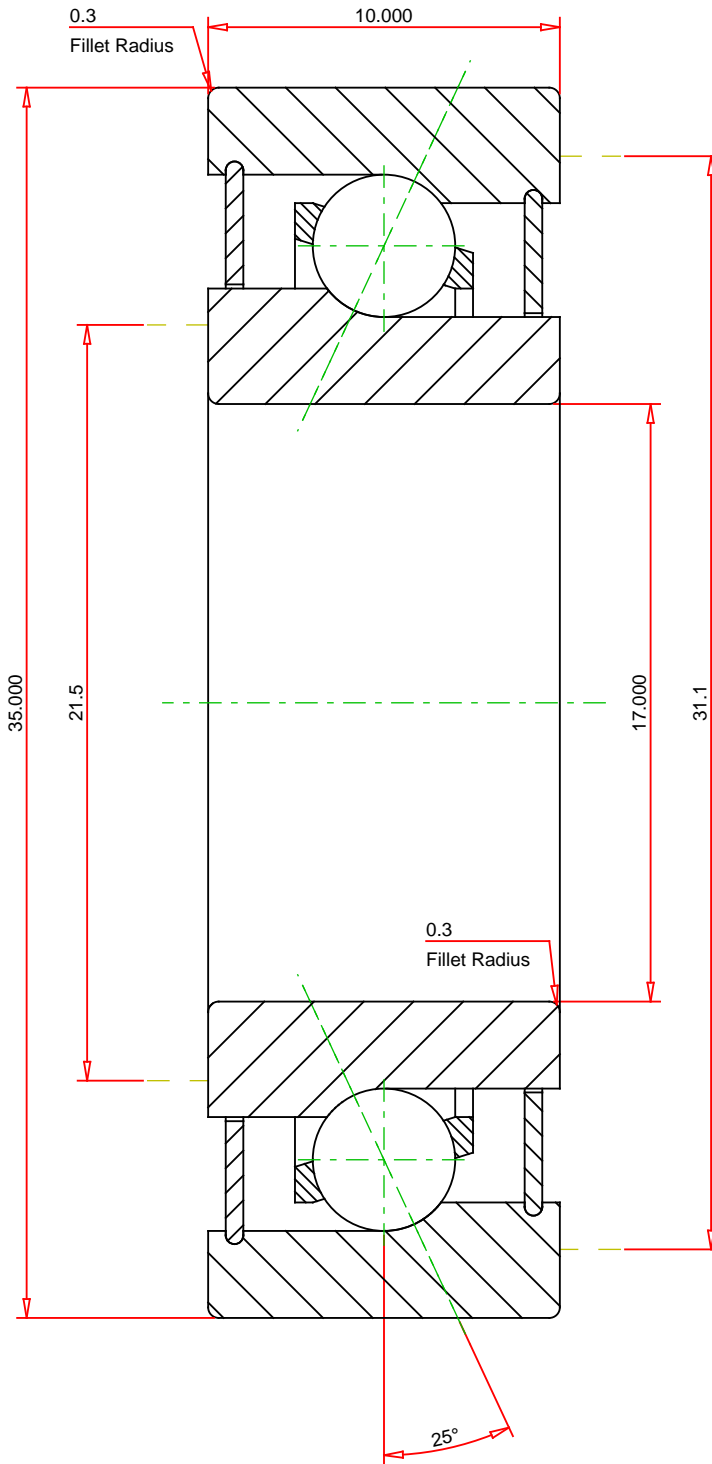
<b>R - Inner Ring "To Clear" Radius<sup>2</sup></b>	0.3 mm 0.012 in
<b>r - Outer Ring "To Clear" Radius<sup>3</sup></b>	0.3 mm 0.012 in

<b>da - Inner Ring Backing Diameter</b>	21.5 mm 0.850 in
<b>Da - Outer Ring Backing Diameter</b>	31.1 mm 1.230 in

<sup>1</sup> Based on  $10^6$  revolutions of calculated fatigue life.

<sup>2</sup> Maximum housing fillet radius that bearing corners will clear.

<sup>3</sup> Maximum shaft fillet radius that bearing corners will clear.



METRIC UNITS

Number of Balls Per Row	12
Bearing Weight	0.038 kg

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NORTH CANTON, OHIO USA

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Fafnir® High Speed Spindle Angular Contact Ball Bearings (9300HX, 9100HX)

Dynamic Radial Rating	6580	N
Static Radial Rating	2700	N

Every reasonable effort has been made to ensure the accuracy of the information contained in this writing, but no liability is accepted for errors, omissions or for any other reason.

**FOR DISCUSSION ONLY**